

Conservation Speech

Imagine a world without water. Our planet would be a dry, dusty, desert-like place unable to support life. Thankfully, this is not the case and the earth has several sources of water. However, while $\frac{3}{4}$ of the earth is covered by water, 97.2 % is saltwater with only 2.8 % being fresh water. That's an extremely small percentage to sustain 6.8 billion people and it has been estimated that by 2030, there will be 8.3 billion mouths to feed. The world gets its food supply from agriculture and in order for agriculture to be able to keep up with the growing demands, farmers are going to need a lot of water for their crops.

A recent projection from CHS Cooperative has indicated that agriculture will produce 300 bushels of corn per acre by 2030, with 12 billion more bushels produced every year. But for agriculture to be productive, it also has to be sustainable and we can't use up all of our natural resources in one generation. Some examples of countries that have exhausted some of their natural resources are Haiti and many parts of Africa. These places have depleted the nutrients in the soil and chopped down most if not all trees for firewood out of a need for survival. However, being so harsh with the resources has actually made their situations much worse. In Africa, the Sahara Desert is growing steadily larger as a result of poor conservation practices. It also takes a lot of work and time to restore the land to a productive state. The United States experienced just that when a large part of the country went through the Dust Bowl in the 1930's. About a decade was needed to begin the process of healing the land. Conservation of our natural resources has been used ever since.

What are some ways we can implement water conservation to ensure that not only the resources are being used properly but also so that everyone will have enough water now and in the future? One fairly simple practice that is already being used and should continue to be used in the future is to leave crop residue in the fields after harvesting. Leaving crop residue in one's field not only protects the soil, but also keeps the soil from eroding during months of disuse, and helps soil hold the moisture that it has received. As a result of using this idea, the soil will keep the proper nutrients and there will be a smaller amount of water runoff in ditches.

Another system that my family has recently installed to be good stewards of the natural resources available to us is an Ag Waste Project. We have a small feedlot and used this project to prevent animal waste and other unwanted elements from the feed storage area from going into the Belle Fourche River watershed. Instead, the sediments from both areas settle and the water goes into the holding dam. In addition, we will be testing all manure to determine the nutrient content and how much of it we can safely apply to our fields without excess nutrients running off the field and into the watershed. Another way to ensure the soil is not over fertilized is by testing it to find out what nutrients it possesses. This helps us reduce the amount of commercial fertilizer we put into the fields which in turn keeps the water clean.

Crops need moisture to properly grow and mature. How can we effectively water our crops without wasting this precious and limited resource? One way my family does this is by using a center pivot. Center pivots make sure each plant receives enough water but still helps conserve water by using less water than flood irrigation and ensures that the water goes directly into the ground instead of piling up at the end of a field.

While it's true that being environmentally friendly has just recently become more popular among the general public, farmers have been protecting and conserving our natural resources for decades. After the Dust Bowl, which came to an end around 1938, farmers, who had literally watched the dirt from their fields blow away during that horrible time, realized that something needed to change. As a result, they began efforts to conserve the soil and water and these efforts have continued ever since. No one wants to go back to the way things were in the Dust Bowl, so I'm glad my family is doing our part to protect our country's natural resources.